

309.06. BASIS OF PAYMENT.

When an item for rolling is shown on the Plans or in the Proposal as a pay item, rolling, measured as provided above, will be paid for at the contract unit price per hour for rolling and such payment shall be full compensation for furnishing the roller, operator, all equipment, fuel, and incidentals necessary to complete the work as specified.

When an item for sprinkling is shown on the Plans or in the Proposal as a pay item, sprinkling, measured as provided above, will be paid for at the contract price per 1000 gallon (kiloliter) for sprinkling, and such payment shall be full compensation for the cost of the water, for hauling, applying and furnishing all equipment, tools, labor and incidentals necessary to complete the work as specified.

- (A) ROLLING HOUR
 (B) SPRINKLING M-GAL (KILOLITER)

SECTION 310 SUBGRADE

310.01. DESCRIPTION.

This work shall consist of preparing the subgrade for the immediate construction of subbase, base, pavement, or surface.

The subgrade shall be constructed in accordance with one of the methods specified herein or by the method indicated on the Plans or in the Proposal for the work.

310.04. CONSTRUCTION METHODS.

- **Method A-Traffic-Bound Surface Course.** *Shape and crown the full width of the existing roadbed with a blade grader to the approximate grade and section required. Unless otherwise indicated, the completed section shall have a crown of at least 2.00%. Remove all exposed rock larger than 3 inches (75 mm) and any unstable soil, and replace it with acceptable material. Finish the roadbed so that it is smooth and uniform, and maintain it in this condition until the next specified course is placed.*
- **Method B - All Other Subbases, Bases, Pavement, or Surface.** *Scarify or otherwise process the subgrade to permit uniform dispersion of moisture to a depth of approximately 6 inches (150 mm).*

NOTE: *In areas with subgrade through rock cuts that cannot be scarified or otherwise processed, shape the areas with soil meeting the requirements of select borrow Subsection 202.02(f), unless otherwise specified, to conform to the planned profile and cross section.*

When the loosened soil has been pulverized, compact it thoroughly and uniformly with suitable equipment for a depth of approximately 6 inches (150 mm) and to at least 95 percent of standard density in accordance with Subsection 202.02(b)(2). Moisture content of the subgrade material at the time of compaction shall be within two points of the optimum moisture content as determined by AASHTO T 99 unless otherwise specified. In areas of the subgrade which are not accessible to rolling equipment, compact them to the required density with approved mechanical tampers.

The surface of the finished subgrade will be tested by the Engineer at selected locations. The variation of the surface shall meet the tolerance requirements of Subsection 301.04. Unless otherwise provided, points closer than 50 feet (15 m) shall not vary more than 1/2 inch (13 mm) from the approved grade in place.

Tests of the subgrade in place shall be made immediately in advance of placing the subsequent course and shall not vary more than the tolerances heretofore specified; any deficiency shall be corrected before material is placed for the subsequent course.

In the correction of the profile grade to conform to established elevations, excavation which cannot be wasted on inside slopes or ditch lines by lateral drifting with a motor grader will be measured and paid for as unclassified excavation in accordance with Section 202. Material required in excess of roadway excavation to raise the existing roadbed to established elevations will be measured and paid for as unclassified or select borrow as specified or directed in accordance with Section 202.

When the condition of the subsurface materials in excess of 12 inches (300 mm) below subgrade elevation prevents the satisfactory construction of the subgrade, excavation to remove the unstable material and backfill with acceptable material to subgrade elevation—within the area and depth designated by the Engineer—shall be done in accordance with Subsection 202.02.

NOTE: Material unsuitable for backfill shall be wasted as directed by the Engineer and the backfill made with acceptable material obtained from borrow in accordance with Subsection 202.02.

When grading and surfacing operations are let in one contract, removal and replacement of unstable material will not be measured or paid for in fill areas.

Instability due to excess moisture in the top 12 inches (300 mm) will not be recognized as justification for removal of unstable material, and payment will not be made for manipulation and aeration of materials in place necessary to establish a satisfactory subgrade.

Measurement of the excavation required for removal of unstable material and excavation for borrow required for backfill (with acceptable material, as provided above) will be made in accordance with Subsection 202.05.

Excavation required for removal of unstable material and excavation for borrow for backfill with acceptable material measured as provided above will be paid for at the contract unit price per cubic yard (cubic meter) for unclassified excavation.

310.05. METHOD OF MEASUREMENT.

Subgrade will be measured by the square yard (square meter).

310.06. BASIS OF PAYMENT.

Accepted subgrade quantities, measured as provided above, will be paid for at the contract unit price as follows:

- (A) SUBGRADE METHOD A SQUARE YARD (SQUARE METER)
- (B) SUBGRADE METHOD B SQUARE YARD (SQUARE METER)

Such payment shall be full compensation for furnishing all materials, equipment, tools, labor, and incidentals to complete the work as specified.

It is the intent of this Specification that payment for this item will be made only one time for work performed on the subgrade as defined in Subsection 101.52 regardless of the number of subbase or base courses placed on the subgrade.

SECTION 311

PROCESSING EXISTING BASE AND SURFACE

311.01. DESCRIPTION.

This work shall consist of the removal, processing, reuse, or disposal of existing aggregate surface course or base course and asphalt surface. This work shall be done in accordance with one of the following methods as specified herein and shown on the Plans or as indicated by a pay item on the Plans and in the Proposal.

311.04. CONSTRUCTION METHODS.

Loosen or scarify the aggregate or other materials in place (or use other suitable methods) to its full depth and width. Process all loosened aggregate or asphalt and break it into pieces which will pass a 3 inch (75 mm) sieve. Windrow the materials on the subgrade or shoulder as the case may require. Exercise care in loosening, removing, processing, and storing aggregate to avoid the addition of excess amounts of soil or other foreign material which would render it unsuitable for use hereafter specified.

NOTE: Damaged material resulting from improper workmanship of the Contractor will not be measured for payment.

- **Method A - For Salvage and Stockpiling.** The processed materials shall not contain detrimental amounts of subgrade or soil or other foreign material. The processed material shall be loaded and hauled to storage locations indicated on the Plans. All materials shall be stored in a neat and workmanlike manner. All grass, weeds, and other rubbish shall be removed from the storage area prior to stockpiling material.
- **Method B - For Use in Subgrade.** The processed materials shall be windrowed on the shoulders during the shaping and conditioning of the subgrade. The materials shall then be spread uniformly over the full width of the section and compacted and completed with the subgrade in accordance with the method specified.
- **Method C - For Use as Subbase.** The processed materials shall be spread evenly on the previously completed and compacted subgrade and then compacted to the requirements specified for the method of subgrade preparation.
- **Method D - For Use in New Base Courses, Shoulders, or Ramps.** The processed materials may be placed on the completed subgrade as a base course, shoulders, or ramps, or they may be blended uniformly with new material for any course. The suitability of the removed materials shall be determined by the Engineer, and the *materials used as authorized*.

NOTE: Materials used in method B, C, and D shall be compacted to not less than 95 percent of standard density for shoulders, ramps, and base courses.